Table 1. Angiographic, IVUS and Clinical Results

	DESyne	Endeavor	p-value
Angiographic Results			
Baseline RVD (post-procedure)	3.00±0.37	3.08±0.35	0.21
6-month angiographic/IVUS			
In-stent Late Lumen Loss	0.12±0.15	0.67±0.47	< 0.001
% neointimal volume	3.6±4.2	20.7±14.2	<0.001
Clinical Results			
6-month DoCE (%)	2.7	3.2	1
Clinically-indicated TLR	1.8	3.2	0.52
12-month DoCE (%)	2.7	3.2	1
Clinically-indicated TLR	1.8	3.2	0.52
24-month DoCE (%)	2.7	3.2	1
Clinically-indicated TLR	1.8	3.2	0.52

Conclusions: The DESyne BD NECSS demonstrated non-inferiority and superiority over Endeavor for in-stent late lumen loss at 6 months. Clinical events remained low through 24 months; clinical results through 36 months will be presented.

TCT-587

What if current generation drug-eluting stents were used in the SYNTAX trial? Analysis of the COMPARE and SYNTAX trials 5 year follow-up

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Background: The SYNTAX trial represents the most comprehensive comparison of percutaneous coronary intervention (PCI) and coronary artery bypass grafting (CABG). Newer generation everolimus-eluting stents (Xience™ V; EES) have however been shown to have superior efficacy and safety profile compared to first generation paclitaxel-eluting stents (Taxus™ Liberté; PES) used in the SYNTAX trial. As to whether outcomes in the SYNTAX trial would have changed using the newer generation EES is unsettled.
Methods: COMPARE is a prospective, randomized, single-center, all-comer trial comparing EES to PES (1:1). As of present is the only randomized trial comparing EES to PES in an all-comers population, which included complex multi-vessel (MV) and/or left main (LM) disease, and had an independent adjudicated 5-year follow-up. To mirror the SYNTAX population, a sub-analysis of COMPARE was performed in subjects undergoing PCI for MV and/or LM disease (n=466; 234 treated with PES and 232 with EES). For both trials identical adjudicated composite endpoint major adverse cardiac events (MACE: death, myocardial infarction, or target vessel revascularization) were used at 5 years. Results were stratified by anatomical complexity using the SYNTAX score.
Results: The incidence of MACE in COMPARE and SYNTAX with EES, PES or CABG are tabulated.

SYNTAX score	COMPARE trial MACE (%)		SYNTAX trial MACE (%)	
	PES (n=234)	EES (n=232)	PES (n=871)	CABG (n=805)
<23 *(low)*	29.5	18.0	30.8	24.7
23-32 *(intermediate)*	40.9	18.6	34.3	22.1
≥33 *(high)*	45.5	36.4	42.2	22.4

Conclusions: The results of this analysis suggest that in subjects with MV and/or LM disease, newer generation EES might be superior to CABG in patients with low SYNTAX score, and equivalent in intermediate SYNTAX score, latter group currently recommended for CABG. Only the high SYNTAX score group showed a clear long-term benefit of CABG over PCI irrespective of stent type used. Newer generation drug eluting stents may allow for further refinement of the boundaries between PCI and CABG, which may have important clinical and economical implications.

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2-Year Clinical Outcome of the Randomized, Multicenter DUTCH PEERS (TWENTE II) Trial, Comparing Cobalt-Chromium Zotarolimus-Eluting Resolute Integrity Stents and Platinum-Chromium Everolimus-Eluting Promus Element Stents in "All-Comer" Patients

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Background: The multicenter, prospective, randomized, single-blinded, investigator-initiated DUTCH PEERS (TWENTE II) "All Comers" Trial demonstrated at 1-year follow-up the non-inferiority of third-generation Resolute Integrity zotarolimus-eluting stents (Medtronic Vascular, Santa Rosa, CA) versus Promus Element everolimus-eluting stents (Boston Scientific, Natick, MA), based on a similar incidence of the primary endpoint target vessel failure (TVF), a composite of cardiac death, target vessel revascularization (TVR), or myocardial infarction (MI). No other follow-up data beyond 12 months have been published from a randomized head-to-head comparison of both stents.
Methods: In 4 study centers in the Netherlands, 1,811 patients were 1:1 randomly assigned to treatment with one of both stents. Patients with any clinical syndrome, any lesion type, and any number of lesions or vessels to be treated were included. Study monitoring and clinical event adjudication were performed by two independent Dutch contract research organizations (Diagram, Zwolle, and Cardialysis, Rotterdam, respectively).
Results: DUTCH PEERS examines an all-comer patient population that included 59% of patients with acute coronary syndromes (20% of all patients presented with an acute STEMI) and 66% of patients with complex target lesions. We will compare for both stent groups the 2-year incidence of TVF (primary endpoint) and various secondary endpoints, including individual components of the primary endpoint, the incidence of stent thrombosis, and other composite endpoints, such as target lesion failure, major adverse cardiac events, and the patient-oriented composite endpoint. In addition, we will report the outcome of patients with longitudinal stent deformation after discontinuation of dual anti-platelet therapy.
Conclusions: Clinical outcome of the DUTCH PEERS trial at 2-year follow-up will be presented.

TCT-589

Comparison of everolimus-eluting and paclitaxel-eluting coronary stents in diabetic patients: 5 year follow up from the COMPARE I trial

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Background: Long-term comparison data of the current generation everolimus-eluting stent (Xience™ V; EES) with the first generation paclitaxel-eluting stent (Taxus™ Liberté; PES) in an all-comers diabetic cohort undergoing percutaneous coronary intervention (PCI) are scarce. Initial results at 2 year follow-up indicated no differences in clinical outcomes between the two stent types in diabetic patients.
Methods: The COMPARE I study was a prospective, randomized, single-center, all-comer trial randomly allocating (1:1) patients to receive either EES or PES. It is to date the only randomized trial comparing EES to PES in a true all-comers population with an independent adjudicated 5-year follow-up. Randomization was stratified by the presence of diabetes. The primary endpoint was major adverse cardiovascular events (MACE) defined as the composite of the safety endpoints death or myocardial infarction (MI) and the efficacy endpoint target vessel revascularization (TVR).
Results: Of the 1800 study patients, 325 patients were diabetic (18.1%) of whom 153 were treated with EES and 172 with PES. At 5 years EES reduced MACE compared to PES in non-diabetic patients (17.1% vs. 23.0%, p< 0.01) with significant reduction in MI (6.6% vs. 11.1%, p< 0.01), TVR (7.0% vs. 10.4%, p=0.02), and definite or probable stent thrombosis (2.6% vs. 5.5%, p< 0.01). In the diabetic patients, EES compared to PES reduced MACE (24.8% vs. 34.3%, p=0.06) and TVR (9.2% vs. 15.7%, p=0.08) without reaching statistical significance. The 5 year outcomes are tabulated.